

Notice of Allowability

Application No.

10/814,885

Examiner

Roberts Culbert

Applicant(s)

PARK, EDWARD HOSUNG

Art Unit

1763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the paper dated 4/3/06.
2. ☒ The allowed claim(s) is/are 36-54.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 4/4/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David Souter on 5/9/06.

1. **Cancel Claims 1-35 and 55-77.**

2. **Application claims 39 and 52 have been amended to recite as follows:**

39. The method of Claim 38, further comprising admixing inert particulate in said polymer, wherein said inert particulate is selected from the group consisting of calcium carbonate, carbon black, graphite, silica fume, kaolin, magnetizable ferrite powder, metal fiber, carbon nanotubes, carbon fiber, glass fiber, fiberglass fiber, microspheres, polyimide powder, molybdenum sulfide powder, brass powder, and combinations thereof.

52. The method of Claim 36, further comprising vacuum evaporating water from said aqueous admixture on said etched surface.

Allowable Subject Matter

Claims 36-54 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art of record fails to teach a method of making a composite comprising:

- (a) admixing an aqueous admixture of from about 10 to about 90 weight percent fluoropolymer aqueous emulsion and a remainder of oxygen-radical-containing copolymer aqueous solution,
 - (b) etching a surface of a polytetrafluoroethylene article to provide an etched surface;
 - (c) saturatively distributing said aqueous admixture onto said etched surface;
 - (d) positioning a structural material article against said aqueous admixture on said etched surface so that said aqueous admixture fluidly fills an interface between said structural material article and said etched surface, said structural material portion made of a material selected from the group consisting of polymer, metal, ceramic, leather, and wood; and
 - (e) curing said aqueous admixture in said interface to bond said structural material article to said etched surface;
- wherein said fluoropolymer aqueous emulsion has from about 20 to about 60 weight percent tetrafluoroethylene-hexafluoropropylene-vinylidene fluoride emulsified terpolymer, a pH from about 6 to about 10, a specific gravity from about 1.1 to about 1.5 grams per milliliter, and a viscosity from about 4 to about 12 Mega Pascal Seconds; and
- wherein said oxygen-radical-containing copolymer aqueous solution has
- (1) from about 20 to about 60 weight percent oxygen-radical-containing copolymer having a softening temperature of from

Art Unit: 1763

about 25 to about 180 degrees Centigrade, a specific gravity from about 1.1 to about 1.5 grams per milliliter, and an estimated equivalent molecular weight from about 100 to about 10,000 , wherein said oxygen-radical-containing copolymer is an oxygen-radical-containing copolymer selected from the group consisting of epoxy polymer, phenoxy polymer, and hydroxylated diamine-diepoxy derivative copolymer, and from about 0.01 to about 1 weight percent polyethylene-oxide-modified silicone polymer coupling agent having a wax melting point of from about 25 to about 45 degrees Centigrade.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberts Culbert whose telephone number is (571) 272-1433. The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1763

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



R. Culbert
Examiner
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Parviz Hassanzadeh
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Art Unit 1763